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Substitute for form 1449a

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet

of

Application Number	10/658,513
Filing Date	09/09/2003
First Named Inventor	Wang
Art Unit	3722
Examiner Name	
Attorney Docket Number	58970.010500

U. S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
		US-			
		US-			
EG		US- 465,392	12-15-1891	Shippe	
		US-			
EG		US- 1,069,930	08-12-1913	Down	
↓		US- 1,216,628	02-20-1917	Teasck	
		US- 1,384,733	07-12-1921	Woods	
		US- 2,230,645	02-04-41	Jones	
		US-			
EG		US- 3,452,625	07-01-1969	Russo	
↓		US- 2,778,252	01-22-1957	Oxford, Jr.	
		US- 3,564,947	02-23-1971	Maier	
		US- 3,592,555	07-13-1971	Mackey, Sr.	
		US- 3,779,664	12-18-1973	Caley et al.	
		US- 3,854,840	12-17-1974	Miyanaga	
		US- 4,116,580	08-26-1978	Hall et al.	
		US- 4,209,275	06-24-1980	Kim	
		US- 4,231,692	11-04-1980	Brabetz et al.	
		US- 4,330,229	05-18-1982	Croydon	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T ³
		Country Code ³ *Number *Kind Code ⁵ (if known)				
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Examiner
Signature

/Eric Gates/

Date
Considered

10/20/2006

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This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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Substitute for PTO 1-49/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Application Number	10/658.513
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Filing Date	09/09/2003
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First Named Inventor	Wang
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Art Unit	3722
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		Number-Kind Code ² (if known)			
EG		US- 4,400,119	08-23-1983	Clement	
EG		US- 4,411,563	10-25-1983	Moon	
EG		US- 4,561,813	12-31-1985	Schneider	
↓		US- 4,573,838	03-04-1986	Omi et al.	
		US- 4,671,710	06-09-1987	Araki	
		US- 4,687,388	08-18-1987	Yokota et al.	
		US- 4,688,972	08-25-1987	Kubota	
		US- 4,740,121	04-26-1988	Arnold	
		US- 4,878,788	11-07-1989	Wakihira et al.	
		US- 4,992,009	02-12-1991	Wallach	
		US- 5,011,342	04-30-1991	Hsu	
		US- 5,056,967	10-15-1991	Hageman	
		US- 5,088,863	02-18-1992	Imanaga et al.	
		US- 5,145,296	09-08-1992	Hougen	
	EG		US- 5,236,291	08-17-1993	Agapiou
↓		US- 5,273,380	12-28-1993	Musacchia	
		US- 5,380,133	01-10-1995	Schimmer	

FOREIGN PATENT DOCUMENTS

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Signature**

/Eric Gates/

Date _____

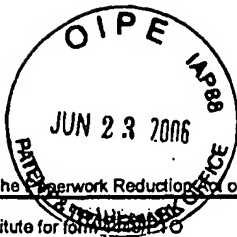
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PTO/SB/08A (08-03)

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**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

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Application Number	10/658,513
Filing Date	09/09/2003
First Named Inventor	Wang
Art Unit	3722
Examiner Name	
Attorney Docket Number	58970.010500

Sheet _____ of _____

U. S. PATENT DOCUMENTS

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EG		US- 5,779,399	07-14-1998	Kuberski	
↓		US- 5,865,574	02-02-1999	Tukala	
		US- 5,876,202	03-02-1999	Berlin	
		US- 5,893,688	04-13-1999	Wiker et al.	
		US- 5,944,460	08-31-1999	Gill	
↓		US- 5,947,659	09-07-1999	Mays	
		US- 5,980,166	11-09-1999	Ogura	
		US			
EG		US- 6,012,882	01-11-2000	Turchan	
↓		US- 6,036,410	03-14-2000	Shun'ko	
		US- 6,056,486	05-02-2000	Colvin	
↓		US- 6,113,321	09-05-2000	Mulroy et al.	
		US- 6,126,367	10-03-2000	Reed	
		US			
EG		US- 6,231,281	05-15-2001	Nishikawa	
		US			
EG		US- 6,435,780	08-20-2002	Flynn	
↓		US- 6,443,674	09-03-2002	Jaconi	
		US- 6,450,272	09-17-2002	Hauptmann et al.	

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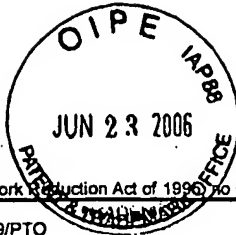
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PTO/SB/08B (07-05)

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**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

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Application Number	10/658,513
Filing Date	09/09/2003
First Named Inventor	Wang
Art Unit	3722
Examiner Name	Gates, Eric Andrew
Attorney Docket Number	58970.010500

Sheet

of

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
EG		A. Metal Cutting Tool Handbook, published by Industrial Press, Inc. at least as early as 1989, pp. 2, 62 – 64, 84 – 85, 168 – 169, 494 – 499.	
		B. Jiangsu Tiangong Tools Corporation Limited catalog, China, at least as early as 09/08/02.	
		C. Shenli Tools Co. Ltd. catalog, China, at least as early as 09/08/02.	
		D. A photo of a drill bit, illustrating a common single-flute construction (apart from the wire hole), on sale at least as early as 09/08/02.	
		E. A photo of a glass drill bit, illustrating a construction on sale at least as early as 09/08/02.	

Examiner
Signature

/Eric Gates/

Date
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